

Applicants hereby submit a clean version of each replacement claim. Please enter each claim.

1. (Amended) An in vivo process for delivering a polynucleotide to a skeletal muscle cell in a mammal, comprising:

- a) inserting the polynucleotide into a blood vessel in the mammal;
- b) applying pressure to the mammal's limb epidermis to impede blood flow of the blood vessel;
- c) applying immunosuppression selected from the group consisting of continuous and transient to suppress an immune response to the polynucleotide; and,
- b) delivering the polynucleotide to the skeletal muscle cell resulting in expression at detectable levels.

5. (Amended) The process of claim 1 wherein the skeletal muscle cell consists of a limb muscle cell.

6. (Amended) The process of claim 5 wherein the limb muscle cell consists of a leg muscle cell.

24. (Amended) The process of claim 6 wherein the leg muscle cell is selected from the group consisting of gastrocnemius and soleus.

25. (Amended) The process of claim 6 wherein the leg muscle is selected from the group consisting of popliteus, flexor digitorum longus, flexor hallucis longus, and tibialis posterior.

29. (Amended) The process of claim 6 wherein the leg muscle is selected from the group consisting of tibialis anterior, extensor hallucis longus, extensor digitorum longus, and abductor hallucis longus.

39. (Amended) An in vivo process for delivering a polynucleotide to a skeletal muscle cell in a mammal, comprising:

- a) inserting the polynucleotide into a blood vessel and applying pressure to a limb wherein the pressure is applied to the mammal's epidermis to impede blood flow of the blood vessel;
- b) delivering the polynucleotide to the mammalian skeletal muscle affected by the applied pressure;
- c) expressing the polynucleotide to detectable levels; and,
- d) maintaining function of the mammal's limbs wherein function is not affected by the delivery process.

42. (Amended) The process of claim 1 wherein immunosuppression delivery is selected from the group consisting of oral treatment and subcutaneous injection.

Applicants hereby submit a marked up version to show changes made.

1. (Amended) An *in vivo* process for delivering a polynucleotide to a [parenchymal] skeletal muscle cell in a mammal, comprising:

- a) inserting the polynucleotide into a blood vessel in the mammal;
- b) [externally impeding *in vivo* blood flow] applying pressure to the mammal's limb epidermis to impede blood flow of the blood vessel;
- c) applying immunosuppression selected from the group consisting of continuous and transient to suppress an immune response to the polynucleotide; and,
- d) delivering the polynucleotide to the [parenchymal] skeletal muscle cell resulting in expression at detectable levels.

5. (Amended) The process of claim 1 wherein the [parenchymal] skeletal muscle cell consists of a limb muscle cell.

6. (Amended) The process of claim 5 wherein the limb muscle cell consists of a leg muscle cell.

23. (Amended) The process of claim [22] 6 wherein the [superficial] leg muscle cell is selected from the group consisting of gastrocnemius and soleus.

25. (Amended) The process of claim [23] 6 wherein the [deep cell] leg muscle is selected from the group consisting of popliteus, flexor digitorum longus, flexor hallucis longus, and tibialis posterior.

29. (Amended) The process of claim [26] 6 wherein the [anterior muscle cell] leg muscle is selected from the group consisting of tibialis anterior, extensor hallucis longus, extensor digitorum longus, and abductor hallucis longus.

39. (Amended) An *in vivo* process for delivering a polynucleotide to a skeletal muscle cell in a mammal, comprising:

- a) inserting the polynucleotide into a blood vessel and applying pressure to a limb [blood vessel] wherein the pressure is applied to the mammal's epidermis to impede blood flow of the blood vessel [externally to mammalian skin];
- b) [applying immunosuppression to the mammal]; delivering the polynucleotide to the mammalian skeletal muscle affected by the applied pressure;
- c) expressing the polynucleotide to detectable levels; and,
- e)d) maintaining [full] function of the mammal's limbs [subsequent to delivery] wherein function is not affected by the delivery process.

42. (Amended) The process of claim 1 wherein immunosuppression delivery is selected from the group consisting of oral treatment and subcutaneous injection.